IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Takahisa HIKIDA

Application No.:

10/530,244

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Not yet assigned

Group Art Unit: 1731

ELASTIC SLEEVE FOR SHOE PRESS, METHOD OF MANUFACTURING For: THE ELASTIC SLEEVE FOR SHOE PRESS AND SHOE PRESS ROLL

Mail Stop PGPub Commissioner for Patents Alexandria, VA 22313-1450

REQUEST FOR CORRECTED PATENT APPLICATION PUBLICATION

Dear Sir:

A Request for Corrected Patent Application Publication is hereby requested to correct mistakes of a material nature, made by the Patent and Trademark Office.

Attached please find a marked-up version of US Patent Application Publication No. US2006/0005392 A1, published on January 12, 2006. The noted corrections are as follows:

Correction # 1 Original patent application page 1, line 2 (please correct the title of the invention).

It is respectfully requested that the above correction be implemented in the republication of the application.

If you have any questions, please telephone the undersigned attorney at (703) 425-8508.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Alexandria, VA 22313-1450. Date of Deposit: February 24, 2006

Signature:

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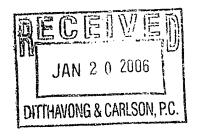
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CONFIRMATION NO. 2655

**OC000000017827677*

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Publication No. US-2006-0005392-A1

Publication Date: 01/12/2006

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently http://www.uspto.gov/patft/.

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Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 703-305-3028.



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SLEEVE

(54) ELASTIC LEEVE FOR SHOE PRESS, METHOD OF MANUFACTURING THE ELASTIC SLEEVE FOR SHOE PRESS, AND **SHOE PRESS ROLL**

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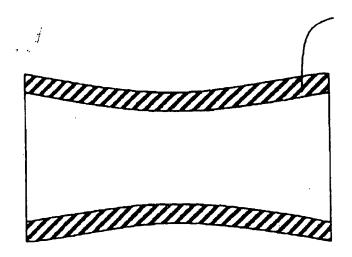
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(57)ABSTRACT

A method of manufacturing an elastic sleeve for a shoe press having an inner diameter gradually reduced from both ends toward a center in an axial direction, comprising the steps of stretching the sleeve formed of an uncured or imperfectly cured elastic material between two rolls, moving the two rolls in directions apart from each other while deflecting the two rolls in such directions that the center parts thereof are moved close to each other by utilizing the tension of the sleeve, and perfectly curing, in this state, the elastic material while rotating the sleeve to gradually reduce the inner diameter of the elastic sleeve from both ends toward the center in the axial direction.

> **ELASTIC SLEEVE** 1



TITLE OF THE INVENTION

ELASTIC SLEEVE FOR SHOE PRESS, METHOD OF MANUFACTURING THE ELASTIC SLEEVE FOR SHOE PRESS AND SHOE PRESS ROLL

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TECHNICAL FIELD

The present invention relates to a shoe press roll which presses a web material with a long nip width, and more particularly, to an elastic sleeve for a shoe press formed of an elastic material in the shape of a tube, a manufacturing method thereof and a shoe press roll employing the same.

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BACKGROUND ART

A shoe press is used in a dehydrating press process in the paper manufacturing industry. To put it briefly, the shoe press forms a pressing region with a large width by pressing an elastic belt (sleeve) toward an opposed press roll by using a press shoe having a predetermined width in the running direction and performs a pressing (dehydrating) process for a web material (wet paper web) which is an object to be pressed in this pressing region. Although a normal roll press applies linear pressure to the object to be pressed, according to the shoe press, since the press shoe has the predetermined width in the running direction, area pressure can be applied to the pressed object. Thus, when the shoe press is used, there are merits in which a nip width can be increased and process performance can be improved.

In addition, other than the dehydrating press, it is considered that the shoe press is used for a calender in which a web material such as paper, a magnetic tape and the like is glazed in the paper manufacturing industry, the magnetic recording medium manufacturing industry and the like.

Japanese Patent Publication No. 2-53543 discloses a press roll which forms a press nip in cooperation with a counter roll, and Japanese Unexamined Patent Publication No. 2000-178892 discloses a method and an apparatus for calendering a fiber web using a surrounded shoe roll.

Fig. 3 is a sectional view showing a shoe press apparatus 100 taken along the direction perpendicular to an axis line, and Fig. 4 is a sectional view showing the shoe press apparatus taken along the axis line. Referring to Figs. 3 and 4, the shoe press apparatus 100 comprises a press